

Release B CDR RID Report

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Document CDR

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RID ID	CDR	65
Review	Release B CDR	
Originator Ref	0416-04	
Priority	2	

Section**Page****Figure Table**

Category Name Processing (DPS) Design

Actionee ECS

Sub Category

Subject Prioritize requests to the data server from PDPS

Description of Problem or Suggestion:

Currently, all acquire requests from PDPS to the Data Server have the same priority. This could cause problems in the following two scenarios:

- 1) a high-priority job with many downstream dependencies could be blocked by data requests in the data server queue from lower priority jobs.
- 2) an on-demand processing request that spawns another on-demand processing request (backward chaining).

Originator's Recommendation

Provide a means for assigning different Data Server priorities to different PGEs or (even better) production requests.

GSFC Response by:

GSFC Response Date

HAIS Response by: W. Knauss

HAIS Schedule

HAIS R. E. C. Schwartz

HAIS Response Date 10/8/96

The priority of requests to SDSRV is based on the priority of the user making the session connection. In order to prioritize the requests from DPS to SDSRV on a per DPR basis, DPS will use three user id's relating to LOW, MEDIUM and HIGH priorities, with appropriate priority values for those user id's configured within DSS. The selection of user id by DPS for DSS sessions for a particular DPR will be made based on the DPR priority, which will be subdivided into three ranges relating to the three user id's.

This design will resolve the problem noted in the first scenario listed in the RID. The second scenario is not valid because the "backward chaining" provided by ECS does not involve an on-demand request spawning other requests. The use of PR collections in "backward chaining" means that the one request is exploded into many requests which are submitted in the proper order, so it is impossible for "backward chaining" to create a logjam in the manner described in the RID.

Status Closed

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Sponsor Kempler

***** Attachment if any *****

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